

IN THE CLAIMS:

This listing of claims replaces all prior versions and listings of claims in the application:

1-2. (canceled)

3. (currently amended) A method of treating a secondary cardiovascular vessel extending from a primary cardiovascular vessel, said method comprising the steps of:

providing a stent having distal and proximal stent portions, said proximal stent portion being more expandable than said distal stent portion;

providing a balloon within said stent, said balloon having a distal balloon portion and a proximal balloon portion, said distal balloon portion being within said distal stent portion and said proximal balloon portion being within said proximal stent portion, said proximal balloon portion being more expandable than said distal balloon portion;

positioning said stent so that said distal stent portion is located in the secondary vessel and said proximal stent portion is located in the primary vessel; and

initially inflating said balloon, ~~whereby said distal balloon portion expands said distal stent portion to support the secondary vessel and~~ whereby said proximal balloon portion expands said proximal stent portion to form a flange engaging an interior wall of the primary vessel; and

fully inflating said balloon whereby said distal balloon portion expands said distal stent portion to support the secondary vessel.

4. (previously amended) A method as defined in claim 3 wherein providing a stent comprises providing a stent with struts of varying length along the length of the stent.

5-6. (canceled)

7. (currently amended) A method of treating a cardiovascular bifurcation including an inlet portion and two outlet portions meeting in a junction, said method comprising the steps of:

inserting a first stent in the inlet portion and one of the outlet portions on either side of the junction;

expanding the first stent to support the inlet portion and the one outlet portion;

inserting a second stent carried on an expandable member through a wall of the first stent so that (1) a distal portion of the second stent is located in the other outlet portion, and (2) a proximal portion of the second stent is located within the first stent;

initially expanding the expandable member such that distal portion of the second stent expands to support the other outlet portion; and expanding the proximal portion of the second stent expands and so that the proximal portion engages the inner wall of the first stent in a flange-like arrangement; and

fully expanding the expandable member such that the distal portion of the second stent expands to support the other outlet portion.

8. (previously amended) A method as defined in claim 7 wherein inserting a second stent comprises inserting a second stent having struts of varying length along the length of said second stent.

9. (canceled)

10. (previously presented) A method as defined in claim 7 wherein the expandable member comprises expanding said second stent comprises expanding said second stent via a balloon having a distal balloon portion having a first diameter when inflated and a proximal balloon portion having a second diameter when inflated, said second diameter being greater than said first diameter.

11. (previously presented) A method as defined in claim 10 wherein:
said distal balloon portion is ovoid shaped and has a length dimension that is greater than its diameter dimension; and
said proximal balloon portion is bulbously shaped and has a diameter dimension that is greater than its length dimension.

12-14. (canceled)

15. (previously presented) A method as defined in claim 3 wherein:

said distal balloon portion is ovoid shaped and has a length dimension that is greater than its diameter dimension; and

said proximal balloon portion is bulbously shaped and has a diameter dimension that is greater than its length dimension.

16. (previously presented) A method as defined in claim 3 wherein said distal and proximal balloon portions are integrally connected to one another, whereby inflation of said balloon results in inflation of both portions of said balloon.

17. (currently amended) A method as defined in claim 4 wherein the length of said struts in said proximal stent portion differs from ~~is greater than~~ the length of said struts of said distal stent portion.

18. (canceled)

19. (previously presented) A method of treating a cardiovascular bifurcation including an inlet portion and first and second outlet portions meeting at a junction, said method comprising:

inserting a first stent in the inlet portion and the first outlet portion;

expanding said first stent to support at least a portion of the inlet portion and at least a portion of the first outlet portion, said first stent extending along the inlet portion and the first

outlet portion so that a wall of said first stent at least partially encompasses the inlet to the second outlet portion;

inserting a second stent carried by an expandable member through an opening in said wall of said first stent so that (1) a distal portion of said second stent is located in the second outlet portion, and (2) a proximal portion of said second stent is located within said first stent;

initially expanding the expandable member ~~said second stent~~ such that a proximal portion of the expandable member expands ~~said distal portion of said second stent~~ supports the second outlet portion and said proximal portion of said second stent to engage ~~engages~~ an inner surface of said wall of said first stent in a flange-like arrangement; and

fully expanding the expandable member such that a distal portion of the expandable member expands ~~said distal portion of said second stent~~ to support the second outlet portion.

20. (currently amended) A method as defined in claim 19 wherein inserting a second stent comprises inserting a second stent having struts of varying length along the length of said second stent, and wherein the length of said struts in said proximal portion of said second stent differs from ~~is greater than~~ the length of said struts of said distal portion of said second stent.

21. (previously presented) A method as defined in claim 19 wherein expanding said second stent comprises expanding said second stent via a balloon having a distal balloon portion having a first diameter when inflated and a proximal balloon portion having a second diameter when inflated, said second diameter being greater than said first diameter.

22. (previously presented) A method as defined in claim 21 wherein:

said distal balloon portion is ovoid shaped and has a length dimension that is greater than its diameter dimension; and

said proximal balloon portion is bulbously shaped and has a diameter dimension that is greater than its length dimension.

23. (previously presented) A method as defined in claim 21 wherein said distal and proximal balloon portions are integrally connected to one another, whereby inflation of said balloon results in inflation of both portions of said balloon.

24. (new) A method for treating a deployment location comprising a secondary cardiovascular vessel extending from a primary cardiovascular vessel, the method comprising:

providing an elongate member including an expandable member thereon, the expandable member comprising a proximal portion and a distal portion, the elongate member carrying a stent having proximal and distal stent portions overlying the proximal and distal portions of the expandable member, respectively;

using the elongate member to guide the stent to the deployment location;

initially inflating the expandable member such that the proximal portion is inflated and the distal portion is not fully inflated, thereby flaring the proximal stent portion; and

fully inflating the expandable member to deploy the distal stent portion within the ostial branch.

25. (new) The method of claim 24, wherein the distal portion of the expandable member is partially inflated when the expandable member is initially inflated.

26. (new) The method of claim 25, wherein a distal end of the distal portion of the expandable member is inflated when the expandable member is initially inflated, thereby trapping plaque within the stent to prevent distal embolization.

27. (new) The method of claim 25, wherein the expandable member inflates from opposite ends when the expandable member is fully inflated.

28. (new) The method of claim 24, wherein the first and second portions of the expandable member are integrally connected to one another.

29. (new) A method as defined in claim 24, wherein the proximal stent portion is expanded up to a degree generally perpendicular to a longitudinal axis of the stent to form a flange against the wall of the primary vessel.

30. (new) The method of claim 24, wherein:

said distal portion is ovoid shaped and has a length dimension that is greater than its diameter dimension when the expandable member is fully expanded; and

said proximal portion is disposed immediately adjacent the distal portion, is bulbously shaped, and has a diameter dimension that is greater than its length dimension when the expandable member is fully expanded.

31. (new) The method of claim 24, wherein the expandable member comprises a balloon.

32. (new) The method of claim 3, wherein a distal end of the distal balloon portion is inflated when the balloon is initially inflated, thereby trapping plaque within the stent.

33. (new) The method of claim 7, wherein a distal end of the expandable member is inflated when the expandable member is initially inflated, thereby trapping plaque within the stent.

34. (new) The method of claim 19, wherein a distal end of the expandable member is inflated when the expandable member is initially inflated, thereby trapping plaque within the stent.

35. (new) A method for treating a deployment location comprising a secondary cardiovascular vessel extending from a primary cardiovascular vessel, the method comprising:

providing an elongate member including an expandable member thereon, the expandable member comprising a proximal portion and a distal portion, the elongate member carrying a stent having proximal and distal stent portions overlying the proximal and distal portions of the expandable member, respectively;

using the elongate member to guide the stent to the deployment location;

initially inflating the expandable member such that the proximal portion is inflated and the distal portion is not fully inflated, thereby flaring the proximal stent portion; and

fully inflating the expandable member to deploy the distal stent portion within the ostial branch,

wherein the proximal portion has a symmetrical bulbous shape when fully expanded for flaring the proximal stent portion up to a degree generally perpendicular to a longitudinal axis of the stent.